

I Claim:

1. A twist-on wire connector for joining the ends of a plurality of electrical wires, comprising:

an insulating shell having a body wall and an end wall, said walls having internal surfaces and defining an internal cavity with an opening at one end for receiving the electrical wires; and

a spring mounted in the internal cavity of the shell and engaging the internal surface of the body wall, the spring including a plurality of coils which have a hexagonal cross-section.

2. The twist-on wire connector of claim 1 further characterized in that the hexagonal cross-section is defined by first and second surfaces joined at a shell-engaging crest, third and fourth surfaces joined at an electrical-wire-engaging crest, a fifth surface joining said first and third surfaces, and a sixth surface joining said second and fourth surfaces.

3. The twist-on wire connector of claim 2 wherein at least one of the fifth and sixth surfaces is generally planar.

4. The twist-on wire connector of claim 2 wherein at least one of the fifth and sixth surfaces is generally concave.

5. The twist-on wire connector of claim 1 wherein the coils form an open helix.

6. A twist-on wire connector for joining the ends of a plurality of electrical wires, comprising:

an insulating shell having a body wall and an end wall, said walls having internal surfaces and defining an internal cavity with an opening at one end for receiving the electrical wires; and

a spring mounted in the internal cavity of the shell and engaging the internal surface of the body wall, the spring including a plurality of coils which have a cross-section with a central bore formed therein.

7. The twist-on connector of claim 6 wherein the cross-section of the coils defines a rectangular outer portion.

8. The connector of claim 6 wherein the plurality windings form an open helix.

9. In a twist-on wire connector of the type having for joining the ends of a plurality of electrical wires and having an insulating shell having a body wall and an end wall, said walls having internal surfaces and defining an internal cavity with an opening at one end for receiving the electrical wires and a spring mounted in the internal cavity of the shell and

engaging the internal surface of the body wall, the improvement comprising a spring including a plurality of coils which have a hexagonal cross-section.

10. The spring of claim 9 further characterized in that the hexagonal cross-section is defined by first and second surfaces joined at a shell-engaging crest, third and fourth surfaces joined at an electrical-wire-engaging crest, a fifth surface joining said first and third surfaces, and a sixth surface joining said second and fourth surfaces.

11. The spring of claim 10 wherein at least one of the fifth and sixth surfaces is generally planar.

12. The spring of claim 10 wherein at least one of the fifth and sixth surfaces is generally concave.

13. The spring of claim 1 wherein the coils form an open helix.

14. In a twist-on wire connector of the type having for joining the ends of a plurality of electrical wires and having an insulating shell having a body wall and an end wall, said walls having internal surfaces and defining an internal cavity with an opening at one end for receiving the electrical wires and a spring mounted in the internal cavity of the shell and engaging the internal surface of the body wall, the improvement comprising a spring including a plurality of coils which have a cross-section with a central bore formed therein.